



Junior Green Ranger Program

The Path To Sustainability: Take a Step

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Each individual step is important on the path to sustainability. These steps accumulate to make a larger impact toward our sustainability goals.

*Look around;
can you find
opportunities to take
a step on the path
to sustainability?*










Sustainability, what is it and how does it work?



Sustainability is the day to day relationship between people and the way we live and the natural environment that surrounds us. The big question is the effect we are placing on our environment by using up our natural resources faster than nature can regenerate them. Awareness is our first step towards preserving a balance between a healthy planet (plants, animals and their ecosystems) and the people and communities that live here on earth. Other forms of sustainability include: reducing waste, reusing materials and recycling materials that can no longer be used.

Complete the activities in this book and earn the Green Ranger Patch!

-  Understanding Natural Resources
-  Reducing Your Environmental Footprint
-  How Long Do Your Footprints Last?
-  Word Search
-  Go Green at Home
-  Interview a Park Ranger
-  Take the Pledge!

Our National Parks are the perfect setting to learn all sorts of cool facts about our environment as well as our country's history. The National Park Service is charged to keep these historical and natural treasures strong and pristine. However we do need your help to protect our parks and places. You can do your part by becoming a Junior Green Ranger. Learn how you can become an active partner and help protect our parks as well as your home and neighborhood. Let's get started!

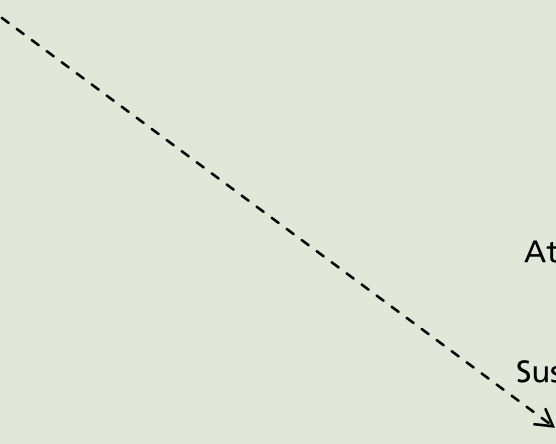
Understanding Natural Resources

Some natural resources are considered **renewable** which means that with little time, nature can make them again and again. Other resources are called **nonrenewable** meaning that once they are gone, it would take millions of years to replace.

From the chart below, draw an X over the natural resources that you think are nonrenewable. In the blank boxes, fill in two more renewable resources. Finally, do you think any of the natural resources below could be a nonrenewable AND renewable resource? Discuss your answer with a family member, friend, or Park Ranger.

FOREST	NATURAL GAS	SUNLIGHT	URANIUM
SOIL	OIL	COAL	WILDLIFE
WIND	WATER		

Conservation Mix and Match: Draw a line matching up the clues and the answers

- | | |
|--|----------------|
| A nonrenewable resource that is found in mines. | Soil |
| Making new things with used materials. | Reduce |
| The breakdown and movement of soil | Sun |
| A natural resource that produces oxygen. | Extinct |
| A way to make material smaller | Atmosphere |
| The source of all energy on earth | Erosion |
| Insects that help pollinate plants. | Sustainability |
| A resource needed to grow plants | Coal |
| A thin layer that surrounds the earth. | Renewable |
| Taking care of our resources so that they are available in the future. | Reuse |
| When the last individual in the population dies, and the organism is gone forever. | Trees |
| A resource that can replenish itself | Bees |
- 

Reducing your environmental footprint



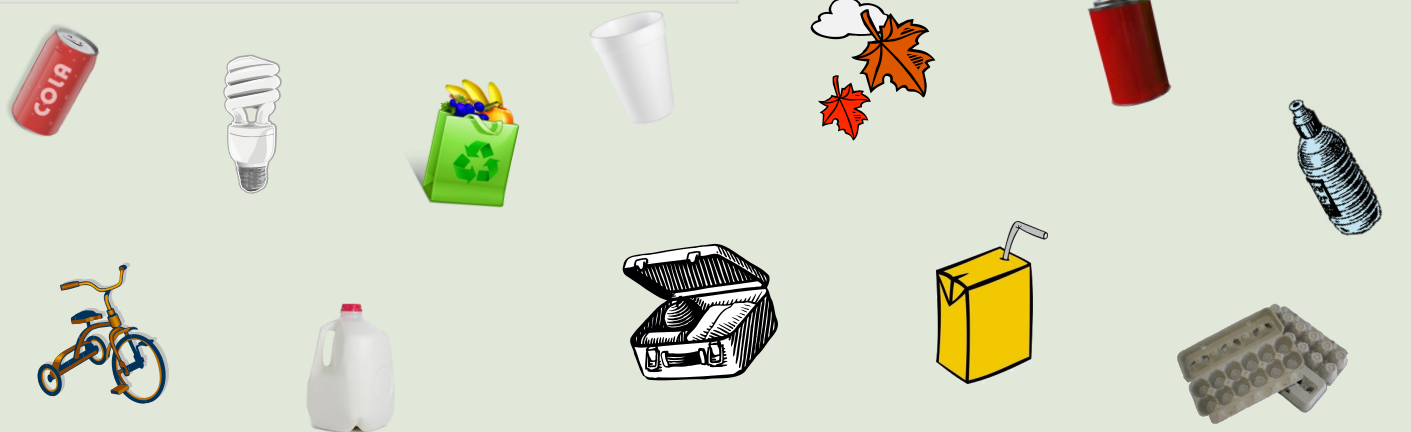
Have you ever walked along the beach or through a puddle of water? If you have, you may have noticed the footprints you left behind. Everyone has them and they follow you wherever you go; the trick however is to make sure they don't stay there. As with the beach prints, the tide washes them away and the sun dries up the wet footprints. Some footprints however are not as easy to get rid of. As a matter of fact, they may not even look like footprints. For example, the type of energy we use, the house we live in and even the food we choose to eat all leaves a lasting footprint on our environment.

The good news is that there are many ways you can help to limit your footprints by following the **3 "R's"**; **Reduce**, **Reuse** and **Recycle**. Turning lights off when you aren't using them reduces energy use. You can make sure your outgrown clothes or old toys get reused by taking them to a donation center instead of throwing them away. When you recycle products such as paper and plastic you make your footprint smaller by decreasing the amount of trash you make. Look around you, at home, at school or at your National Park and see how other people are trying to erase their footprints.

THE 3 "R's"

REDUCE, REUSE AND RECYCLE

See how well you can reduce your footprint. Connect each item by drawing a line to the appropriate container. Do you think any of them could be placed in more than one container?



Recycle



Reuse



Trash



Reduce

How Long Do Your Footprints Last?



Things that used to be alive (organic material), like dead plants and animals, can break down completely. This process is called decomposition. These materials decompose differently depending on a lot of factors, including temperature, oxygen levels, amount of water and many others. Materials that are man made (inorganic) like Styrofoam and other plastics, may break down and “disappear” but the small pieces never actually go away. These small pieces of plastic and other materials can pollute our land and water. The table below shows some items and the estimated time and it takes for them to either decompose (organic), or break down and not be seen (inorganic). Remember, just because a plastic cup may break down, it still can be harmful to us and the environment.

Item	Time to break down	Item	Time to break down
Paper	2 to 6 weeks	Styrofoam Cup	50 Years
Apple Core	2 Months	Aluminum Can	80 to 200 Years
Milk Carton	3 Months	Plastic Bottle / Milk Jug	450 Years
Plastic Bag	15 Years	Fishing Line	600 Years
Tin Can	50 Years	Glass Bottle	1,000,000 Years

U.S. National Park Service; Mote Marine Lab, Sarasota, FL and “Garbage In, Garbage Out,” Audubon magazine, Sept/Oct 1998

How much longer does it take for a plastic bottle to break down than an aluminum can? _____

If you have a choice between a milk carton and a milk jug, which will you choose? _____

If you threw away a plastic bottle today, about what year will it break down? _____

At the grocery store, should you choose paper or plastic bags? _____

BONUS DISCUSSION TOPIC

An aluminum can may take longer than a Styrofoam cup to break down and decompose , but does that mean that Styrofoam is better for the environment? Why or why not? Discuss this topic with an adult or park ranger.

Word Search



V S O N Q V G N E T R X C S L S T K O M
E S U E R F N L O K W E U O L E N O G O
B H R N S W B L Q I S S D H E E E P V O
X Y R N N A V G L L T F S U V R M R D Z
B D I G W U P D O A B A G X C T N E M C
Y Y Y E I T L V I T T A V K Y E O S V A
F U N E P I H N S C C A I R F J R E W R
A E K Y F O A R E S O U R C E S I R S B
R Y T E V B L O L K P F S F U S V V A O
H Q C U I H E L X V E I J A D C N E E N
T G S L D F T A U Z Q C N K U Q E O Y F
F C I J B Q A B U T E L C Y C E R G C O
D T E L T J M Q M K I Q M G H P R H I O
Y X J T E A I Z M K C O M F P E J K N T
V T I A O L L F U E L S N S N X Q Q F P
R R R D I R C N A T U R E E U A F O O R
P T E O N I P S X O K C N X B D G B S I
H R S T O E L B A D A R G E D O I B S N
M C Q R A P X F B Y I S S C V K A C I T
J L I E I W H S O A Y S D D V R Q U L S

BIODEGRADABLE

CARBONFOOTPRINT

CLIMATE

CONSERVATION

EARTH

ENERGY

ENVIRONMENT

FOSSIL

FUEL

NATURE

POLLUTION

PRESERVE

PROTECT

RECYCLE

REDUCE

RENEWABLE

RESOURCES

REUSE

SOIL

SUN

SUSTAINABILITY

TREES

WATER

WILDLIFE

Go Green at Home

Walk around your home with your family and see what you can do to make your home greener.

Can you think of other ways to save energy and help the environment?

Other ideas include...

- Use refillable water bottles
- Donate toys and clothes

Reduce, Reuse, and Recycle everything you can!

Bedroom

- ✓ Unplug computers and music when not in use
- ✓ Turn lights off when you leave

Attic

- ✓ Add insulation

Bathroom

- ✓ Check for leaking or running water
- ✓ Take showers instead of baths to save water
- ✓ Turn lights off when you leave
- ✓ Turn water off when brushing your teeth

Bedroom

- ✓ Unplug chargers from the wall
- ✓ Use energy efficient light bulbs
- ✓ Unplug electronic games when not in use

Kitchen

- ✓ Check for leaky faucets
- ✓ Be sure refrigerator door is closed tight
- ✓ Unplug unused appliances when not in use
- ✓ Turn lights off when you leave the room
- ✓ Select "save energy button" on dishwasher

Family Room

- ✓ Turn lights, fan and TV off when not in use
- ✓ Check the temperature. Program thermostat for energy saving day/night

Basement/Office

- ✓ Use energy efficient light bulbs
- ✓ Turn lights and computer off when not in use

Laundry Room

- ✓ Wash a full load of clothes
- ✓ Use cold water instead of hot

Interview A Park Ranger

Ask a park ranger about the following:



Ranger's full name: _____

Does the park have a recycling program? _____

What does the park recycle? _____

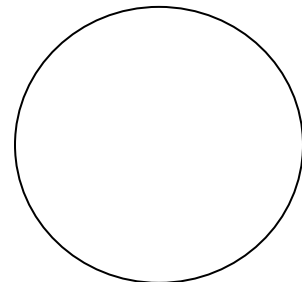
Does the park have a plan to protect water resources? _____

What are some examples? _____

In what ways does the park conserve energy? _____

What else does the park do to protect the environment? _____

Park Name



Park Stamp

Take the Pledge

I, _____

Write your name here.

Pledge to protect the
environment and all
its resources



Fill out the booklet and have a ranger look it
over to receive your patch.

OR

Mail the booklet to the following address. We
will send you your award patch and mail the
booklet back to you.

Junior Green Ranger Program
Division of Interpretation and Education
National Park Service
100 Alabama Street SW
Atlanta, GA 30303